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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of	DOCKET FILE COPY ORIGINAL
Advanced Television Systems and) MM Docket No. 87-268
Their Impact Upon the Existing)
Television Broadcast Service)

To: The Commission

REPLY COMMENTS

Spectrum Initiatives, Inc. ("SII"), pursuant to Section 415 of the rules and regulations of the Federal Communications Commission ("FCC" or "Commission") and by counsel, respectfully submits these reply comments in regard to the FCC's proposal in the Sixth Further Notice of Proposed Rule Making ("Sixth Further Notice")¹ to eliminate the use of UHF Channel 20 in Philadelphia for land mobile operations and it proposal to allocate DTV Channel 18 in Secaucaus, NJ and DTV Channel 21 in Vineland, NJ. SII opposes these proposals because of the significant adverse affect such action would have on land mobile operations in the Philadelphia metropolitan area, especially with the lack of other alternative spectrum to which the incumbent licensees could be relocated.

I. <u>Introduction</u>

SII is headquartered in Great River, New York and sells and services communications equipment. A number of its customers operate systems, or are end users on systems, which are assigned frequencies in the TV channels 19 and 20 spectrum in the Philadelphia metropolitan area. SII is well aware of the congestion on

Sixth Further Notice of Proposed Rulemaking, (FCC 96-317), MM Docket No. 87-268, 11 FCC Rcd 10968 (1996).

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shared VHF and UHF frequencies allocated for land mobile operations in the Philadelphia area and the lack of frequency availability in other land mobile allocations, such as in the 800 MHz and 900 MHz bands, in the Philadelphia area for private mobile radio operations. It, therefore, takes this opportunity to provide the FCC its opinion on elimination of TV channel 20 in Philadelphia for land mobile operations and the allocation of DTV channels 18 and 21 in New Jersey.

II. Elimination of Channel 20 in Philadelphia for Land Mobile Operations

The Commission in the Sixth Further Notice states that its proposed allocation of spectrum for digital TV systems ("DTV") would not require the elimination of Channel 20 in Philadelphia which is currently allocated for land mobile operations. The broadcast industry's sample allocation plan, however, does presume such elimination. Consequently, the Commission seeks comment on whether the benefit which would accrue by elimination of Channel 20 for land mobile operations in the Philadelphia area i.e., the reduction of congestion of TV spectrum in the northeast corridor, outweighs the burden which would be imposed on the land mobile operators by such elimination. Sll submits that the FCC would impose a significant burden on land mobile operations in the Philadelphia area which may result in substantial adverse economic impact to the existing land mobile operators in the Philadelphia area and may adversely affect the safety and welfare of the general population in and around the Philadelphia metropolitan area.

As the Commission recognized there are a significant number of licenses issued for operations on the Channel 20 spectrum in the Philadelphia metropolitan area -- over

9600 base stations licensed which support over 16,000 mobile units. A majority of the mobile users are public safety entities and small businesses which rely on the systems to ensure that their employees have effective communications and to protect the health, safety, and welfare of the employees as well as the public at large.

Not only is there is a significant number of existing users licensed to operate on Channel 20 in the Philadelphia area, the number of mobile users which utilize the spectrum is increasing because of the changes in the manner in which other land mobile spectrum is being used. For example, in the Philadelphia area, a number of small businesses previously operated on a dispatch-only basis on high-powered, analog Specialized Mobile Radio ("SMR") systems. Such facilities provided cost-effective, quality service and coverage to the areas needed by the small businesses. A majority of these SMR facilities are being converted to digital facilities with enhanced services which require a significant investment for the small business owners for new equipment and result in higher monthly charges for the enhanced services, which these owners do not require or want.

Consequently, these small businesses are migrating to systems operating on frequencies on the Channels 19 and 20 spectrum because (1) the spectrum is one of the few bands for which the Commission is currently accepting applications; (2) the equipment necessary to operate in the band is relatively inexpensive as compared to the equipment needed to operate on systems using more advanced technologies; (3) dispatch-only service is available at monthly charges equal to or less than paid for SMR service; and (4) with an appropriate number of mobile units operating on a

system, no other users will be assigned to operate on the frequency within a specified distance. The loss of the availability of this spectrum for land mobile operations could imperil the telecommunications options of the majority of the numerous incumbent licensees and other potential licensees/users which have been forced from other land mobile spectrum.

Should the Commission decide to eliminate the use of Channel 20 in the Philadelphia area for land mobile operations, SII submits that the Commission must identify alternate spectrum to which the incumbent licensees could be relocated and must impose an obligation on the broadcast industry to reimburse incumbent licensees for all relocation costs. In other bands in which the Commission has re-allocated spectrum from one type of use to another, alternate spectrum has been identified to which incumbent licensees may be relocated and the entities which benefit by the re-allocation of the spectrum are required to pay for such relocation.²

Philadelphia is a spectrum deficient area and, therefore, there is a lack of alternative spectrum available for relocation of the significant number of incumbent licensees. Moreover, the relocation costs which may be incurred by the broadcast industry may be substantial. SII contends that any benefit to the public obtained by the reduction of congestion for TV operations by elimination of Channel 20 for land mobile operations is outweighed by the resulting burden and disruption to the land mobile operations as well as the considerable monetary costs to the broadcast industry to subsidize the relocation efforts.

^{2/} See 47 C.F.R. SS101.69, 90.699.

Accordingly, SII supports the Commission's current allocation proposal which does not result in the elimination of Channel 20 in Philadelphia for land mobile operations and opposes any DTV allocation plan which would require such elimination.

III. Allocation of DTV Channel 18 and DTV Channel 21 in New Jersey

In the Sixth Further Notice, the Commission continued to propose that DTV stations operate at co-channel and adjacent channel spacing to the city-center of land mobile operations as close as 250 km (155 miles) and 176 km (110 miles), respectively.³ Nevertheless, the DTV allocations set forth in the Sixth Further Notice, the Commission proposed to allocate DTV Channel 18 in Secaucaus, NJ and DTV Channel 21 in Vineland, NJ. These two DTV channels are adjacent to Channels 19 and 20 which are allocated for land mobile use in Philadelphia.⁴ The TV stations which would use the DTV channels are substantially less than 250 km (110 miles) from the city-center coordinates of Philadelphia and the potential for interference to land mobile operations by the DTV stations as well as interference to the DTV receivers by the land mobile operations is great.

The allocation of these DTV channels in New Jersey may result in existing land mobile base stations being located within one mile of the adjacent channel DTV station. The close proximity of the DTV stations to the land mobile operations may result in severe interference to the land mobile operations, and possibly cause land

^{3/} See Second Further Notice of Proposed Rulemaking, 7 FCC Rcd 5376 (1992).

The Commission recognized in certain instances that the co-channel spacing between DTV allocations and land mobile operations were not met, such as the case of Channel 18 and Channel 21.

mobile interference to the DTV receivers. The FCC stated that it "believe[s] that there are engineering solutions available to handle any adjacent channel interference concerns between land mobile and DTV.⁵ However, the FCC proposed no engineering solutions in the Sixth Further Notice. Nor can SII envision any such solution when the DTV station is less than 2 miles from land mobile operations.⁶

At a minimum, SII agrees with Motorola's comments⁷ that, if the FCC adopts its proposed allocation in the Sixth Further Notice, the FCC must indicate on any short-spaced DTV license that the DTV licensee remain obligated to correct any interference without cost to the land mobile licensee. Currently, the FCC imposes this requirement on TV licensees operating on UHF-TV channels 14 and 69 which are immediately adjacent to land mobile allocations.⁸ SII urges the Commission to extend its requirements to include DTV assignments on adjacent channels to land mobile allocations over the entire 470-512 MHz band.

^{5/} Sixth Further Notice at ¶ 93.

In its comments, Motorola suggested that the FCC reduce DTV out-of-band emissions. Comments filed by Motorola dated November 22, 1996, pp 13-14, Appendix B. However, where DTV stations and land mobile operations are within 10 miles of each other, Motorola found that such reduced DTV emissions will not eliminate adjacent channel interference problems. Id.

^{7\} Comments filed by Motorola, Inc., p. 15.

^{8\} See 47 C.F.R. § 73.687(e)(3).

In sum, SII opposes the FCC's proposed allocation of DTV channels 18 and 21 to Secaucaus, NJ and Vineland, NJ, respectively, and asks that the FCC reconsider such allocation plan.⁹

IV. Conclusion

The FCC should not eliminate Channel 20 in Philadelphia for land mobile operations. This spectrum is extensively utilized for essential land mobile operations, including use by public safety entities. The Philadelphia area is spectrum deficient and there is no alternate spectrum available to which incumbent licensees could be relocated. Further, the cost of relocation of such incumbent licensees would be significant and, in keeping with the Commission's prior precedent, should be borne by the entities benefitting from such relocation. Thus, the public benefit obtained by reduction of TV congestion in the northeast corridor is certainly outweighed by the burden imposed on the incumbent land mobile operators and the broadcast entities, which indirectly will have an adverse affect on the public. SII contends that the Commission must find that the public receives far greater benefit by the retention of Channel 20 for land mobile operations in Philadelphia.

Further, SII opposes the allocation of DTV Channel 18 and 19 in New Jersey because it does not appear that an engineering solution is readily available to cure the potential interference problems between adjacent channel land mobile operations and

In the <u>Second Further Notice of Proposed Rulemaking</u>, different DTV channel allocations for Secaucaus and Vineland were made. Thus, the adjacent channel spacing was not an issue for the land mobile operations on Channels 19 and 20 in the Philadelphia area.

the DTV stations. Thus, the FCC should modify its allocation plan to identify additional DTV channels for allocations in NJ.

Respectfully submitted,

SPECTRUM INITIATIVES, INC.

Terry J. Romine

Its Attorney

Lukas McGowan Nace & Gutierrez, Chartered 1111 Nineteenth Street, 12th Floor Washington, D.C. 20036 (202) 857-3500

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